



# **Reducing Waste and Increasing Recycling in Bar Harbor, ME**

April, 2015

# Table of Contents

## About WasteZero

## Pay-As-You-Throw Overview

## Pay-As-You-Throw in Maine

## Potential Program Results

## Next Steps



# About WasteZero



- In business since 1991, & 100% driven to cut trash in half across the US
- Is a national leader in municipal waste reduction
- Helps municipalities reduce waste, increase recycling, & save money
- Specializes in PAYT programs, with experience in all types
- Has a 100% success rate with WasteZero-designed programs
- Offers consulting, as well as program design & management
- Is a certified B Corp, meeting rigorous social & environmental standards
- Is based in Raleigh, NC, with regional support around the nation





# Table of Contents

About WasteZero

**Pay-As-You-Throw Overview**

Pay-As-You-Throw in Maine

Potential Program Results

Next Steps



# The Trash Problem: Financial & Environmental

- Many cities are struggling financially, and solid waste is a big contributor.
- The cost of trash has risen 2.4 times faster than inflation over the last 30 years.
- Often, trash fees do not cover the full costs.
- Even financially healthy communities spend more than they need to on trash.
- Our mission to cut the trash in half and help communities...



- Generate revenue
- Reduce costs
- Align revenues with costs
- Free up resources



- Reduce waste
- Increase recycling
- Save energy and resources
- Reduce greenhouse gases

A close-up photograph of a mechanical kilowatt-hour meter. The meter has four circular dials. The first dial (leftmost) shows 8, the second shows 7, the third shows 6, and the fourth (rightmost) shows 5. Below the dials, the word "KILOWATTHOURS" is printed. Below the text, there is a horizontal scale with markings for 100, 200, and 300.



**1 No Fee**

## 2 Request

### 3 Blank Check

[illegible]

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# The Solution: Pay-As-You-Throw

With PAYT, residents pay for trash based on how much they generate. If they recycle more and throw away less, they pay less. The economic incentives to reduce waste are strong.

## Benefits:

- ✓ Solid waste is reduced
- ✓ Recycling increases
- ✓ Collection and disposal costs drop
- ✓ The environment is improved
- ✓ Landfill life is extended



# Types of PAYT

PAYT programs can take many different forms. Bag-based systems are by far the most effective, in WasteZero's experience.



## Cash

Residents pay a set fee in cash for each bag they dispose of at a convenience or transfer station.



## Variable-Rate Carts

Residents choose from among different sizes of carts, paying more for the larger carts and less for the smaller ones.



## Overflow

Residents pay a flat fee that covers everything they can fit into a certain size cart, and then pay extra (usually by the bag) to dispose of anything that does not fit into that cart.



## Stickers/Tags

Residents pay by the bag by affixing a pre-paid tag or sticker to each bag of trash.



## Bags (Most Effective Method)

Residents dispose of their waste in specialized bags approved by the municipality and clearly marked with the municipal seal or other unique instructions or information.



# The WasteZero Bag-Based PAYT Model

WasteZero's primary approach to PAYT is the most effective available means of reducing municipal solid waste, and it works with all collection methods.

1 Cut Fees (if possible)

2 Pay per Bag for Trash

3 Residents Recycle More

**City of Anytown, USA**  
PO BOX 2334  
ANYTOWN, USA

**Water & Sewer Charge**

Service	Rate	Amount
Water	\$2.00	\$2.00
Sewer	\$2.00	\$2.00
Water & Sewer		\$4.00

**Trash**

Service	Rate	Amount
Trash	\$14.00	\$14.00

**Solid Waste \$14.00**

**Payment Information**

City of Anytown, USA  
PO BOX 2334  
ANYTOWN, USA



- Fairer to residents
- Easy to implement
- Works better than any alternative

- No direct cost to the town
- Works with any collection method, automated or manual

# The WasteZero Bag-Based PAYT Model

WasteZero Trash Metering® is a comprehensive, turn-key offering for municipalities. A Program Management team provides a single point of contact for each city.

## Official Bags



- US-made by WasteZero
- Drawstring closure for convenience, litter control
- Trash and recycling bags differentiated by
  - Color
  - Printing

## Distribution



- Delivery to retailers for sale or distribution to residents
- Retailer relationship management
- Order processing and fulfillment
- Inventory management
- Customer service
- Accounting and reporting

## Communications



- Communications support to educate residents about the program:
  - Town Meetings
  - Launch Announcements
  - Program Web Site
  - Ongoing Toll-Free Customer Service Line
  - Educational Materials

## Media Support

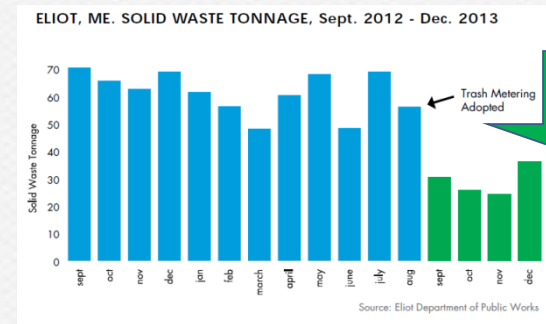
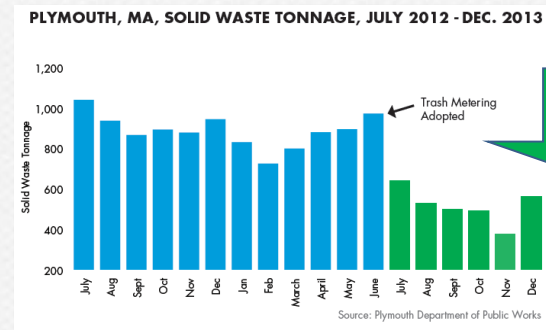
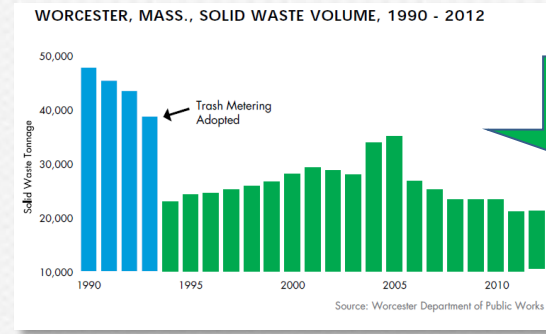


- Media relations support to help the town prior to launch, as well as on an ongoing basis after launch:
  - Press briefings
  - Talking points
  - Press releases
  - Data collection (regarding program results)
  - Media briefings regarding program successes

# WasteZero Trash Metering™

## Typical Results

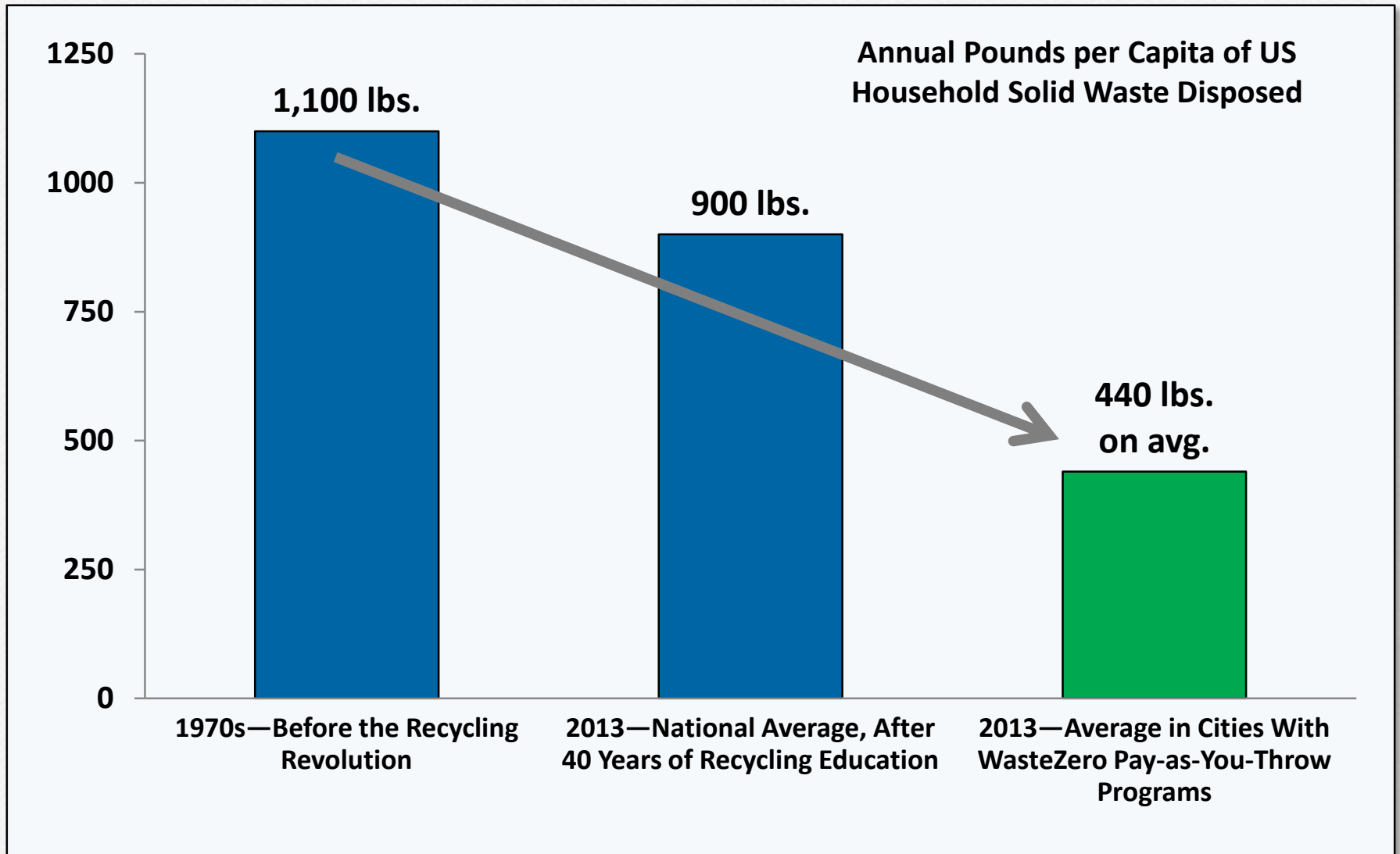
- Average reduction of MSW and disposal costs of 44%
- Substantial increases in recycling
- Significant results within 30-90 days
- Permanent impact
- Effective in cities and towns, regardless of
  - Population size
  - Average income level
  - Numerous demographic factors
  - Method of trash collection





# WasteZero Trash Metering™

## Typical Results - *Continued*



# Table of Contents

About WasteZero

Pay-As-You-Throw Overview

**Pay-As-You-Throw in Maine**

Potential Program Results

Next Steps



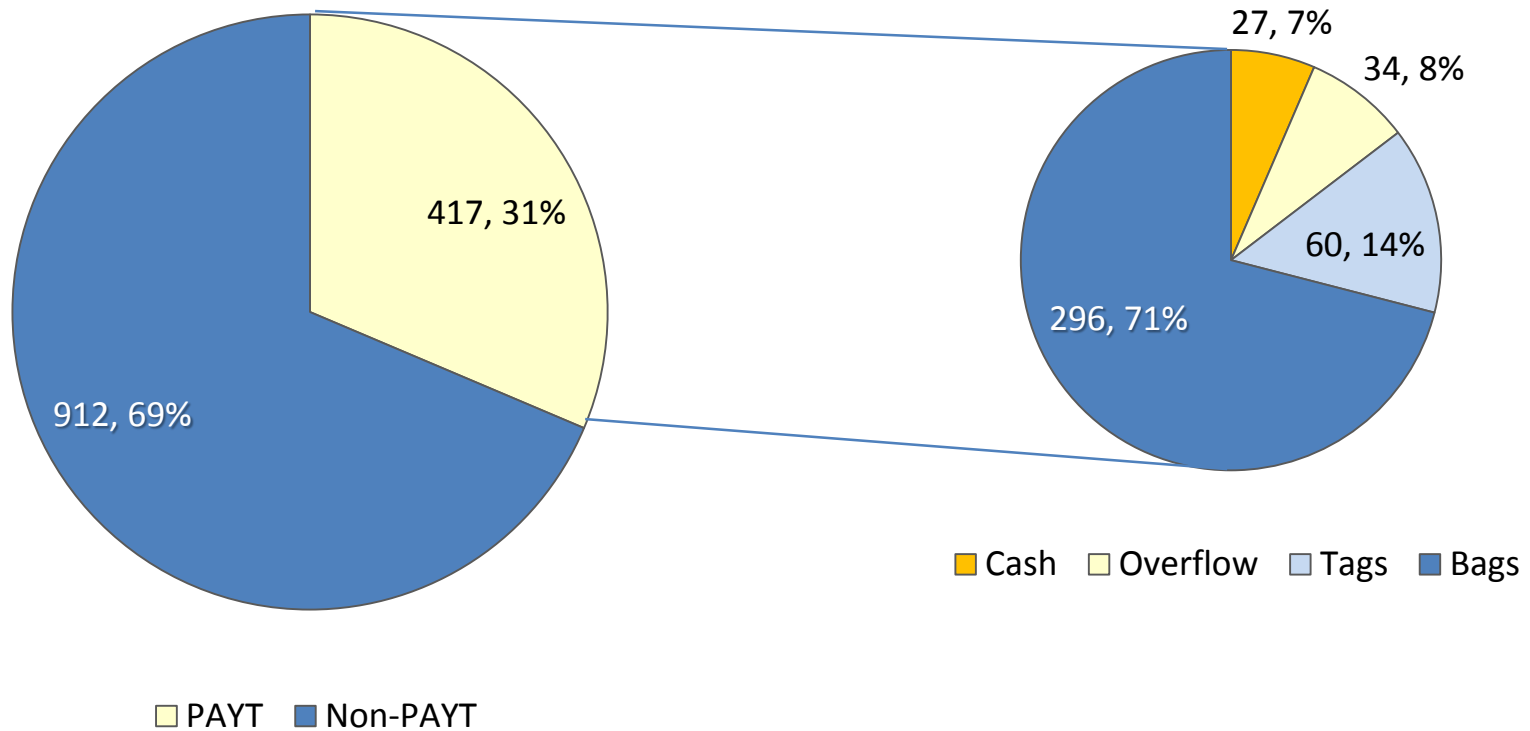
# PAYT in Maine

31% (or 417,000) of the 1.33 million people in ME live in towns that have some form of PAYT.

## Payment Method for Trash Service in ME

By pop. in thousands and percent of pop.

Total pop. = 1.33 million



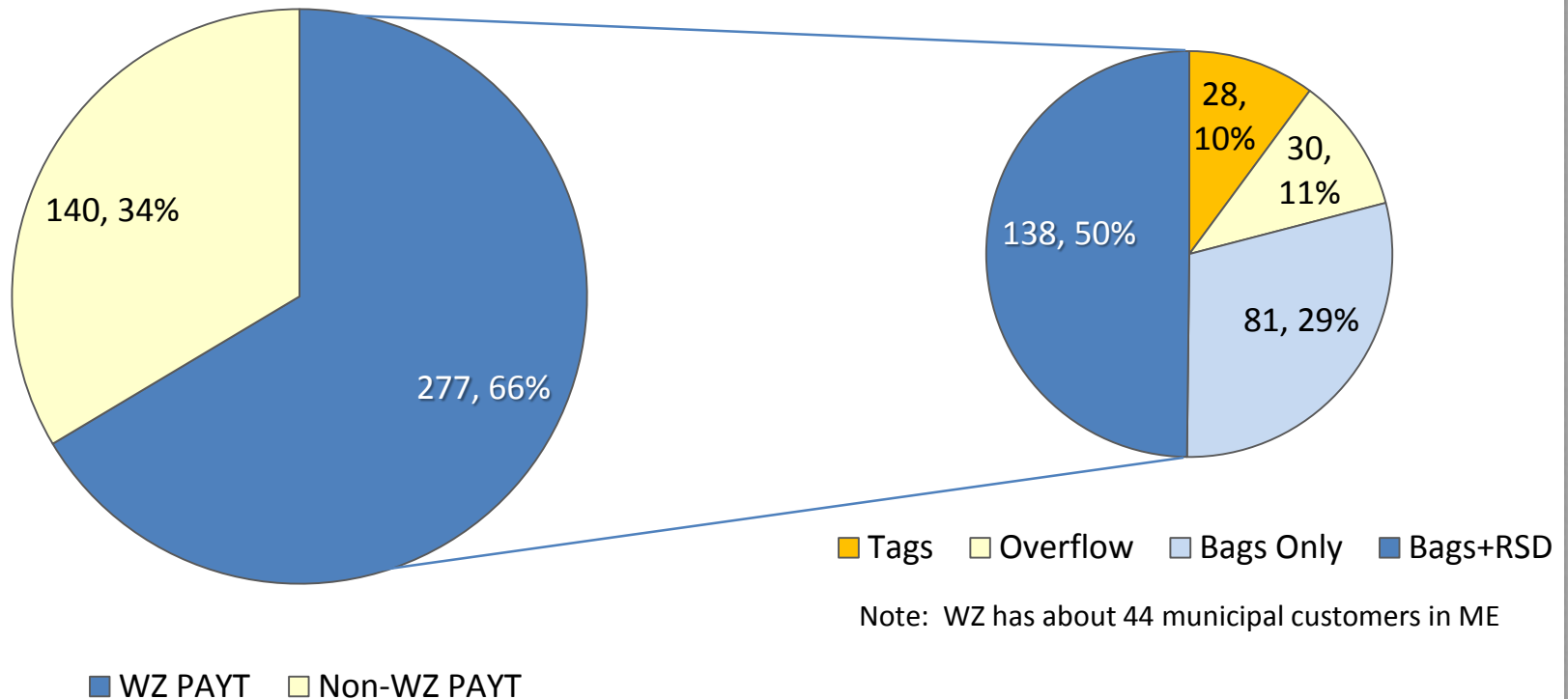


# PAYT in Maine

Of the 417,000 who live in PAYT towns, WasteZero serves municipalities encompassing about two-thirds of them.

## WasteZero's Share of PAYT

By pop. in thousands and percent of pop.  
PAYT pop. = 417,000

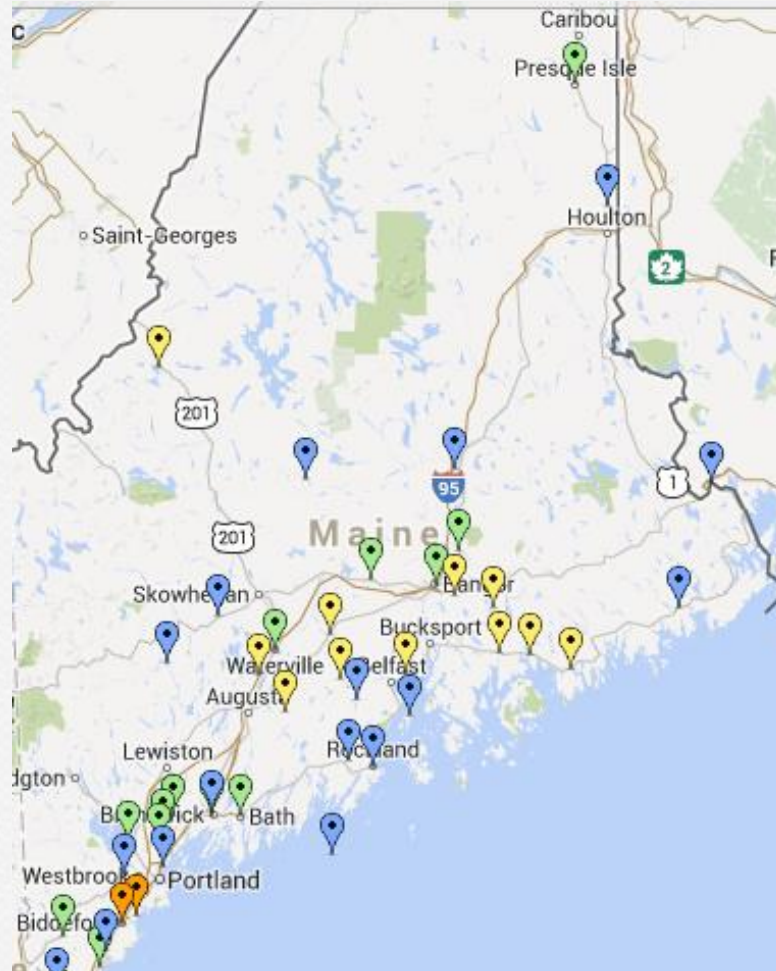


Note: WZ has about 44 municipal customers in ME

# PAYT in Maine

## WasteZero's Presence

WasteZero's 44 customers encompass 277,000 people and are spread throughout the state.



Legend	
Trash Metering	
Bag	
Tag	
Overflow-Bag	

# Table of Contents

About WasteZero

Pay-As-You-Throw Overview

Pay-As-You-Throw in Maine

**Potential Program Results**

Next Steps

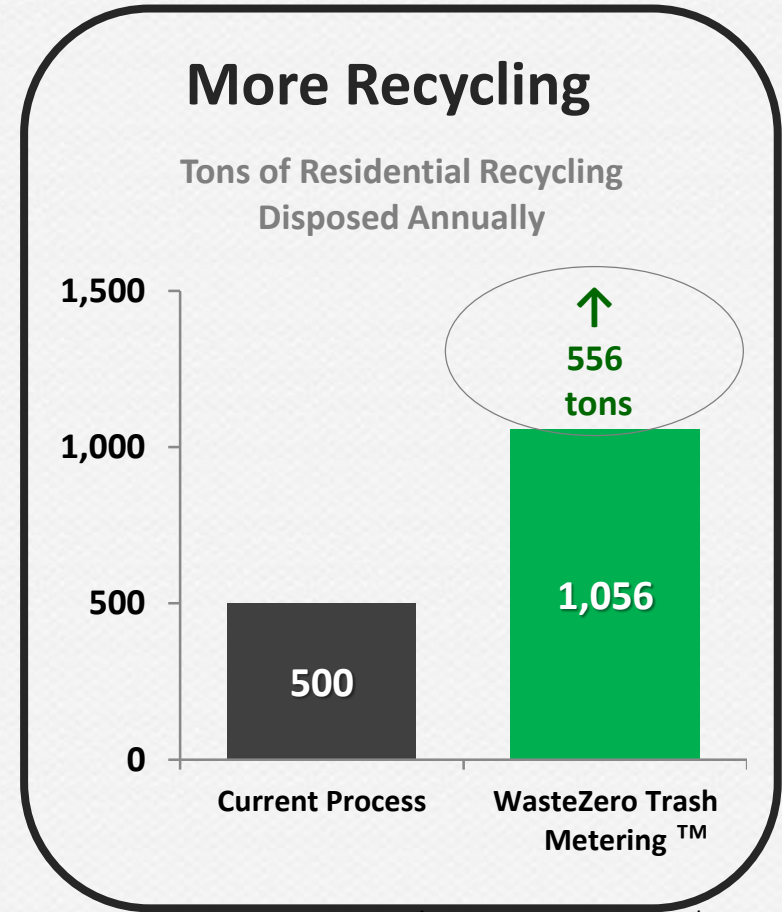
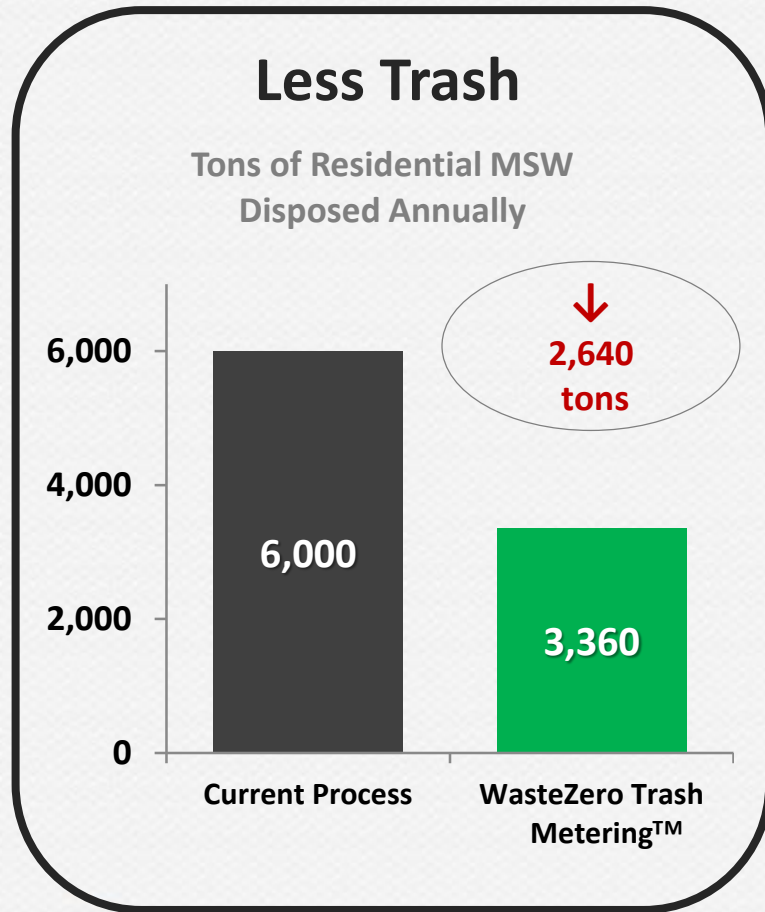




# PAYT in Bar Harbor

## Preliminary Annual Tonnage Impact of PAYT

Based on a 44% reduction rate, Bar Harbor's projected annual trash diversion is 3,577 tons, generating tipping fee savings of \$198,000 annually<sup>1</sup>. Likewise, the town's recycling rate will jump from 8% to 24%<sup>2</sup>.



<sup>1</sup>Based on tip fee of \$74.97/ton

<sup>2</sup>Percentage based solely on MSW and household recyclables

# PAYT in Bar Harbor

## Preliminary Annual Financial Impact of PAYT\*

	1 Year	3 Years	5 Years	10 Years
<b>Revenue Bag Sales<sup>1</sup></b>	\$518,000	\$1,554,000	\$2,590,000	\$5,180,000
<b>Savings Tipping Fees</b>	\$198,000	\$594,000	\$990,000	\$1,980,000
<b>Net Program Impact</b>	<b>\$716,000</b>	<b>\$2,148,000</b>	<b>\$3,580,000</b>	<b>\$7,180,000</b>

***With the WasteZero Trash Metering™ program, Bar Harbor could realize \$7.18 million in benefits and savings over the next ten years.***

\* Cumulative Benefits and Savings for Years 3,5, and 10

<sup>1</sup>Net of program services and supplies

# PAYT in Bar Harbor

## Preliminary Annual Environmental Impact of PAYT

### CO<sub>2</sub>e (Greenhouse Gas)

Annual  
Reduction

**5,000**  
Metric Tons

- Reduced carbon footprint
- Less pollution
- Healthier environment for residents



*Equivalent to:*



Removing

**980**

passenger vehicles from the road

*or*

Reducing gasoline consumption by

**562,000**

gallons



### BTUs (Energy Used)

Annual  
Reduction

**30,000**  
Million Units

- Reduced costs
- Reduced carbon footprint
- Increased energy security



*Equivalent to:*



Powering

**260**

residential homes

*or*

Installing

**3,800**

rooftop solar panel arrays



Source: EPA WARM Model



# Table of Contents

About WasteZero

Pay-As-You-Throw Overview

Pay-As-You-Throw in Maine

Potential Program Results

**Next Steps**



## Next Steps

**Together, we can make a big difference in your community.**

- Gather your feedback and answer any questions that you may have
- Understand the process for moving an initiative like this forward
- Identify other stakeholders / decision-makers that we should meet
- Refine our preliminary impact analysis
- Develop a step-by-step plan for advancing this initiative

# Conclusion

- Bar Harbor is well-positioned to benefit from a bag-based PAYT program
- WasteZero is the only firm that provides all supplies and services to run such a program
  - Program Design
  - Bags
  - Retail Store Distribution
  - Inventory Management
  - Accounting & Reporting
  - Resident Communications
  - Customer Service
- We would appreciate the opportunity to help Bar Harbor investigate this opportunity further.

## Questions and Answers

# Thank You!



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